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Notice of Allowability	Application No.	Applicant(s)	
	09/902,529	BOSCOLO, GALLIANO	
	Examiner	Art Unit	
	Clark F. Dexter	3724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *the response filed on July 13, 2005*.

2. ☒ The allowed claim(s) is/are *1-7,14,15 and 19-21*.

3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☒ All b) ☐ Some* c) ☐ None of the:
      1. ☒ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Charles Gagnebin on January 26, 2006.

2. The application has been amended as follows:

In the Claims

Claim 1 has been rewritten as follows:

--1. (Currently amended) A method for perforating a non-woven sheet of fibers or filaments comprising the steps of:

fixing on a perforated cylinder at least one insert, including, at one end, a plane surface, and provided with a recess that emerges in said plane surface, that has an inner surface and that has a sharp edge formed by the intersection of the inner surface with the plane surface;

bringing the non-woven sheet into contact with the perforated cylinder and with the plane surface of the insert;

bringing a perforating member, which is sized to be capable of simultaneously abutting against substantially the entire sharp edge of the insert, ~~facing~~ to the recess of the insert to locally compress fibers or filaments of the non-woven sheet between the perforating member and the sharp edge of the insert, whereby force between the perforating member and the insert ~~and thereby~~ causes the perforating member to translate along [[an]] a translational axis; and

driving ~~moving~~ the perforating member such that it rotates ~~in rotating movement~~ about an axis of the perforating member that is parallel to the translation axis for [[and]] cutting out a portion of the non-woven sheet by shearing of the fibers or filaments of the non-woven sheet compressed between the perforating member and the sharp edge of the insert through the combined actions of rotation and pressure.--.

Claim 5 has been rewritten as follows:

--5. (Amended) Method according to claim 2, characterized in that each insert is fixed by screwing onto the perforated cylinder, and the direction of screwing of each insert corresponds to the first direction of rotation of a perforating member.--.

Claim 6, line 2, "plane" has been deleted.

Claim 7, line 1, "an insert" has been changed to the following:

--at least one of said inserts--.

Claim 16 has been canceled.

Claim 19 has been rewritten as follows:

--19. (Currently Amended) A method perforating a sheet, comprising:

providing a ~~rotating~~ plurality of dies revolving about a die rotation axis, each die having a sharp edge defining a shape;

providing a ~~counter-rotating~~ plurality of punches counter-revolving about a punch rotation axis that is generally parallel to the die rotation axis, wherein each punch has a surface that is sized to be capable of simultaneously abutting against substantially the entire sharp edge of a respective one of the dies;

bringing one side of the sheet into contact with at least some of the dies;

bringing at least one of the punches into contact with the other side of the sheet at a position that corresponds to a respective one of the dies to locally compress a portion of the sheet between the punch and the sharp edge of the die; and

cutting out a portion of the sheet by driving the at least one punch such that the punch rotates about a longitudinal axis of the punch; [[and]]

wherein the longitudinal axis of each punch is generally transverse to the punch rotation axis, and ~~cutting out a portion of the sheet,~~ wherein the rotation of the at least one punch about its longitudinal axis and the compression of the sheet together cause shearing of the portion of the sheet compressed between the punch and the sharp edge of the die, thereby cutting out the portion of the sheet.--.

Remarks

3. Claims 1 and 19 have been amended to more clearly define the claimed invention. Claim 5 has been amended for agreement with the claims upon which it depends. Claims 6 and 7 have been amended to further clarify the claims. Claim 16 has been canceled because it includes a recitation that lacks antecedent basis because it generally corresponds to claim 5.

Additional Prior Art

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The newly-cited prior art disclose inventions which have features similar to the claimed invention. However, these inventions, each taken alone or in combination with the prior art of record, do not teach or fairly suggest the claimed invention.

REASONS FOR ALLOWANCE

5. The following is an examiner's statement of reasons for allowance:

The primary reason for the allowance of the claims is the presence of limitations in the independent claim(s), which are not found in the prior art references. The examiner believes that the record of the prosecution *as a whole* makes clear his reasons for allowing a claim or claims. For example, the prior art of record does not teach or fairly suggest the claimed invention of claim 1 including:

fixing on a perforated cylinder at least one insert as claimed; bringing the non-woven sheet into contact with the perforated cylinder and with the plane surface of the insert; bringing a perforating member, which is sized to be capable of simultaneously abutting against substantially the entire sharp edge of the insert, to the recess of the insert to locally compress fibers or filaments of the non-woven sheet between the perforating member and the sharp edge of the insert as claimed; and driving the perforating member as claimed.

As another example, the prior art of record does not teach or fairly suggest the claimed invention of claim 19 including:

providing a plurality of dies as claimed; providing a plurality of punches as claimed, wherein each punch has a surface that is sized to be capable of simultaneously abutting against substantially the entire sharp edge of a respective one of the dies; bringing one side of the sheet into contact with at least some of the dies; bringing at least one of the punches into contact with the other side of the sheet as claimed; cutting out a portion of the sheet as claimed; wherein the longitudinal axis of each punch is generally transverse to the punch rotation axis, and wherein cutting out a portion of the sheet is performed as claimed.

More specifically, the limitation "bringing a perforating member, which is sized to be capable of simultaneously abutting against substantially the entire sharp edge of the insert, to the recess of the insert to locally compress fibers or filaments of the non-woven sheet between the perforating member and the sharp edge of the insert" and "driving the perforating member such that it rotates" in the manner claimed are

examples of limitations in claim 1 that are absent from the prior art teachings. Similarly, the limitation of "bringing at least one of the punches into contact with the other side of the sheet at a position that corresponds to a respective one of the dies to locally compress a portion of the sheet between the punch and the sharp edge of the die," wherein each punch has a surface that is sized to be capable of simultaneously abutting against substantially the entire sharp edge of a respective one of the dies and "cutting out a portion of the sheet by driving the at least one punch" in the manner claimed are examples of a limitations in claim 19 that are absent from the prior art teachings.

It is noted that the subject limitation(s) for each claim distinguishes the claimed invention from a standard punch which is not "sized to be capable of simultaneously abutting against substantially the entire sharp edge of the insert," as set forth in claim 1, and is not "sized to be capable of simultaneously abutting against substantially the entire sharp edge of a respective one of the dies" as set forth in claim 19.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clark F. Dexter whose telephone number is (571)272-4505. The examiner can normally be reached on Mondays, Tuesdays, Thursdays and Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan N. Shoap can be reached on (571)272-4514. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Clark F. Dexter
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Art Unit 3724

cfd
February 6, 2006